



Department
of
Public Works

Infrastructure Services
Division

Facilities Development
& Management Section

**RADIO REPAIR SHOP
COMMUNICATIONS
EQUIPMENT ROOM
AIR CONDITIONING
REVISIONS**

4733 W Vliet Street
Milwaukee, Wisconsin

ISSUED FOR BID
July 2011

Project Number
RM5445139905

SHEET INDEX

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S-1	EXISTING ROOF FRAMING PLAN (REFERENCE ONLY)

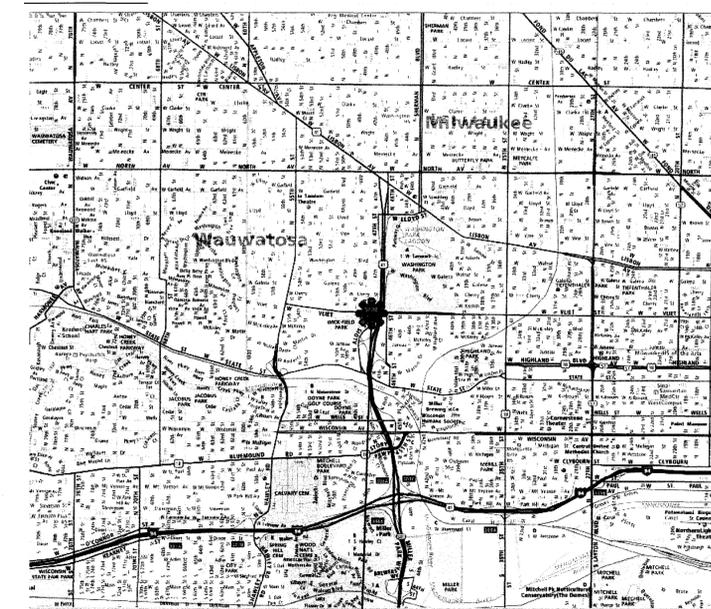
GENERAL NOTES:

- BEFORE SUBMITTING A BID, THE CONTRACTOR SHALL OBTAIN A COMPLETE SET OF BIDDING DOCUMENTS TO DEVELOP A COMPLETE UNDERSTANDING OF THE ENTIRE PROJECT. THE CONTRACTOR SHALL VISIT THE WORK SITE FOR AN UNDERSTANDING OF SITE CONDITIONS AND PERFORM ANY INVESTIGATIONS NECESSARY TO DEVELOP A COST PROPOSAL FOR THE WORK. THE SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. NO CONSIDERATION OR ALLOWANCE WILL BE MADE FOR CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED OR FOR DIFFICULTIES ENCOUNTERED THAT COULD HAVE BEEN FORESEEN HAD A SITE EXAMINATION BEEN MADE.
- EXISTING CONDITIONS ARE SHOWN BASED IN INFORMATION OBTAINED FROM CURSORY FIELD SURVEYS AND EXISTING BUILDING DOCUMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS BEFORE PROCEEDING WITH WORK. IF EXISTING CONDITIONS DIFFER FROM DRAWINGS TO THE EXTENT THAT THE DRAWING INTENTION CANNOT BE ACHIEVED, CONTACT THE ENGINEER FOR DIRECTION.
- WHERE DEMOLITION OF EQUIPMENT OR SYSTEMS IS CALLED FOR ON THE DRAWINGS THE INTENTION OF THIS WORK IS THAT ALONG WITH THE ITEMS IDENTIFIED FOR DEMOLITION RELATED SUPPORTS, PIPING, AND MISCELLANEOUS RELATED ITEMS THAT WILL NO LONGER HAVE A PURPOSE AFTER DEMOLITION OF THE EQUIPMENT OR SYSTEM ALSO BE DEMOLISHED.
- EXISTING SYSTEMS SERVE OCCUPIED AREAS. DEMOLITION AND INSTALLATION OF NEW SYSTEMS NEED TO BE COORDINATED TO MINIMIZE DOWNTIME. COORDINATE SCHEDULE WITH CITY FOR TYING OF EXISTING TO NEW SYSTEMS.
- CONTRACTOR SHALL REMOVE ALL DEBRIS RESULTING FROM DEMOLITION AND INSTALLATION OF NEW WORK DAILY. THE WORK AREA SHALL BE KEPT CLEAN AT ALL TIMES TO THE SATISFACTION OF THE CITY.
- THE CONTRACTOR SHALL SIGN IN AND IDENTIFY ALL PERSONNEL WORKING AT THE SITE ON A DAILY BASIS WITH THE SUPERVISOR IN CHARGE AT THE SITE. ALL PERSONNEL LEAVING THE SITE WILL SIGN OUT PRIOR TO DEPARTURE.
- IF HAZARDOUS MATERIALS ARE IN ANY WAY SUSPECTED, INCLUDING BUT NOT LIMITED TO ASBESTOS, POLLUTANTS OR PCB, INFORM THE CITY IMMEDIATELY AND SUSPEND PROGRESS ON THAT PORTION OF WORK.

BASIC REQUIREMENTS

- REGULATORY REQUIREMENTS**
WORK SHALL BE PERFORMED IN COMPLIANCE WITH CITY OF MILWAUKEE ORDINANCES, STATE OF WISCONSIN COMMERCIAL BUILDING CODE, STATE OF WISCONSIN ELECTRICAL CODE VOLUMES 1 AND 2, AND THE NATIONAL ELECTRICAL CODE (NEC).
- PROJECT/SITE CONDITIONS**
COORDINATE WITH DEPARTMENTS IN BUILDING ANY WORK THAT MAY DISRUPT OPERATIONS. THIS INCLUDES BUT IS NOT LIMITED TO ELECTRICAL POWER OUTAGES, STAGING OF EQUIPMENT AND TIMING OF WORK.
- SUBMITTALS**
ORDERS FOR EQUIPMENT SHALL INCLUDE A SUBMITTAL REQUIREMENT WHEREBY THE SUPPLIER SHALL PROVIDE INFORMATION ON THE EQUIPMENT BEING FURNISHED PRIOR TO FULFILLING THE ORDER.
SUBMITTALS SHALL INCLUDE A COMPLETE BILL OF MATERIAL, MANUFACTURER'S TECHNICAL DATA SHEETS ON THE EQUIPMENT, WIRING AND INSTALLATION INSTRUCTIONS.
SUBMITTALS SHALL BE FURNISHED TO THE ENGINEER FOR REVIEW TO DETERMINE IF THE EQUIPMENT BEING FURNISHED IS CONSISTENT WITH THE DESIGN INTENT.
PROVIDE (8) COPIES OF SUBMITTALS. FOUR COPIES WILL BE RETURNED WITH ENGINEER'S STAMP. ONE COPY SHALL BE LEFT AT THE JOB SITE, ONE COPY SHALL BE RETURNED TO THE SUPPLIER AND TWO COPIES SHALL BE SAVED FOR O&M MANUALS. SUBMITTALS MAY BE DELIVERED ELECTRONICALLY IN LIEU OF THE METHOD DESCRIBED ABOVE.
- RECORD DRAWINGS**
ONE COPY OF THE DRAWINGS SHALL BE KEPT ON SITE AND MARKED RECORD DRAWINGS.
EACH DAY THE SUPERVISING ELECTRICIAN SHALL MARK THIS DRAWING WITH ADDITIONAL INFORMATION, FIELD CHANGES, AND DIMENSIONS LOCATING CONDUIT RUNS.
AT THE COMPLETION OF THE WORK THESE DRAWINGS SHALL BE TURNED OVER TO THE CITY OF MILWAUKEE, FACILITIES MANAGEMENT SECTION FOR PRODUCTION OF PERMANENT RECORD DRAWINGS.
- CONDUIT**
INTERIOR RACEWAYS SHALL BE EMT. MOTOR AND TRANSFORMER CONNECTIONS SHALL BE FMC.
- WIRE**
ALL WIRE SHALL BE COPPER WITH THWN-2 INSULATION. MINIMUM WIRE SIZE SHALL BE #12 AWG.
WIRE COLOR SHALL BE CONSISTENT WITH PHASE COLORS ESTABLISHED WITH THE SERVICE. WHERE COLORED WIRE INSULATION IS NOT AVAILABLE WRAP WIRE WITH THE APPROPRIATE COLORED TAPE AT EACH TERMINATION POINT AND AT EVERY PULL OR JUNCTION BOX.
PROVIDE EQUIPMENT GROUNDING CONDUCTOR WITH EVERY BRANCH OR FEEDER CIRCUIT.
- LABELING**
ALL EQUIPMENT, CIRCUIT BREAKERS, AND CABLE SHALL BE LABELED. SEE SPECIFICATIONS FOR REQUIREMENTS.
- TEMPORARY POWER**
TEMPORARY POWER FOR CONSTRUCTION SHALL COMPLY WITH NFPA 241 STANDARDS FOR "SAFEGUARDING, ALTERATION, AND DEMOLITION OPERATIONS".

LOCATION MAPS



PROJECT LOCATION

PROJECT LOCATION MAP

PROJECT DESCRIPTION

THIS PROJECT INCLUDES A SINGLE BASE BID. THE BASE BID SHALL COMPLETE ALL WORK ASSOCIATED WITH THE INSTALLATION OF ONE ROOFTOP UNIT (RTU-5) THAT SHALL SERVE AS A BACKUP TO THE INTERIOR AIR CONDITIONING UNIT. NEW CONTROLS FOR THE NEW ROOF TOP UNIT WILL BE REQUIRED FOR THE BASE BID. THE CONTROLS WILL EXTEND MONITORING STATUS TO THE MPD'S POLICE ADMINISTRATION BUILDING ON STATE STREET.

- BASE BID EXCLUSIONS:**
- TESTING AND BALANCING OF WATER AND AIR FLOWS.
 - ELECTRICAL POWER WIRING.

- BASE BID:**
- INSTALL ONE ROOFTOP UNIT AND EXTEND UTILITIES (CONDENSATE DRAIN) TO THE NEW UNIT. EXTEND NEW DUCTWORK SUPPLY AND RETURN DUCTWORK. PROVIDE NEW ROOF PENETRATION, STRUCTURAL SUPPORT AND ROOF CURB AS REQUIRED TO SET THE NEW UNITS.
 - FURNISH NEW HVAC OPENING IN EXISTING ROOF DECK, FRAME OPENING WITH NEW STEEL BEAMS. ENGAGE THE SERVICES OF A LICENSED STRUCTURAL ENGINEER TO DETERMINE BEAM SIZES AND LOCATION.
 - PROVIDE DDC CONTROL SYSTEM TO OPERATE NEW ROOFTOP UNIT. SYSTEM SHALL COMMUNICATE TO THE MPD'S POLICE ADMINISTRATION BUILDING NEAR 8TH AND STATE STREET IN MILWAUKEE, WI.



Thomas E. Tarkowski
7/14/11

WORK COMMON TO ALL BIDS:

- PROVIDE ALL REQUIRED PENETRATIONS THROUGH INTERIOR WALLS, EXTERIOR WALLS AND FLOORS WHERE SHOWN ON PLANS. PROVIDE CURBS, AND SAFING AND SEAL AIR AND WATER TIGHT.
- CONTRACTOR SHALL PROVIDE ALL TAPS FOR CONTROLS.
- PROVIDE WARRANTY, START-UP SERVICES, O & M MANUALS, RECORD AS-BUILT DRAWINGS AND ALL OTHER SPECIFIED DOCUMENTATION.
- THE LAYOUT OF THE PIPING, DUCTWORK, EQUIPMENT, ETC., AS SHOWN ON THE DRAWINGS SHALL BE CHECKED AND EXACT LOCATIONS SHALL BE DETERMINED BY THE DIMENSIONS OF THE EQUIPMENT APPROVED AND THE CONTRACTOR SHALL OBTAIN APPROVAL FOR THE REVISED LAYOUT BEFORE THE APPARATUS IS INSTALLED. THE CONTRACTOR SHALL FIELD MEASURE OR CONSULT EXISTING RECORD ARCHITECTURAL AND STRUCTURAL DRAWINGS IF AVAILABLE FOR ALL DIMENSIONS, LOCATIONS OF PARTITIONS, LOCATIONS AND SIZES OF STRUCTURAL SUPPORTS, FOUNDATIONS, ETC.
- AFTER REVIEW AND WITHOUT ADDITIONAL COST TO THE CITY, MAKE MINOR MODIFICATIONS IN THE WORK AS REQUIRED BY STRUCTURAL INTERFERENCES, BY INTERFERENCES WITH WORK OF OTHER SECTIONS OR FOR PROPER EXECUTION OF THE WORK.

City
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Milwaukee
Department
of
Public Works
Infrastructure
Services Division
Facilities
Development
& Management
Services

PROJECT: Police Radio Repair Shop
DESIGNED BY: DTP
DRAWN BY: DTP
CHECKED BY: TET
DATE: July 2011
SCALE: VARIES
JOB NUMBER:
SHEET NUMBER:
OF:
1

Police Radio Repair Shop
Air Handling Unit Installation
4733 W. Vliet Street
DPW - FACILITIES MANAGEMENT
TITLE SHEET

REVISIONS

DESIGNED BY
DTP

DRAWN BY
DTP

CHECKED BY
TET

DATE
July 2011

SCALE
VARIES

JOB NUMBER

SHEET NUMBER
T-1

OF
1